



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

OCT 17 2001

DOT-E 5861
(SEVENTH REVISION)

EXPIRATION DATE: March 31, 2003

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Pacific Scientific Company/HTL/KIN-TECH Div.
Duarte, CA
2. PURPOSE AND LIMITATIONS:
 - a. This exemption authorizes the manufacture, mark, sale and use of a non-DOT specification cylinder conforming to all regulations applicable to DOT specification 4DS, except as specified herein, for use in transporting materials authorized under this exemption. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.304(a)(1), 173.302(a)(1) and § 175.3 in so far as non-DOT specification cylinders are not authorized, except as specified herein.
5. BASIS: This exemption is based on the application of Pacific Scientific Company dated February 20, 2001, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Material Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Compressed gas, n.o.s.	2.2	UN1956	n/a

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are welded stainless steel pressure vessels described below and conforming to DOT Specification 4DS(§§ 178.35 and 178.47) except:

§ 178.47(a) *Type, size and service pressure.*

(Add) Authorized designs:

HTL Part No.	Volume (cu.in.)	Diameter x Length in inches	Service Pressure in psig
32191950	1400	14" sphere	525
32197469	1600	14"x15 1/2	705
32191850	2500	17" sphere	525

§ 178.47(b) *Steel.*

ARMCO 21-6-9 stainless steel. The minimum ratio of the minimum ultimate tensile value to the maximum stress at test pressure must be 1.25.

§ 178.47(q) *Marking.*

Applies except the vessel must be marked with "DOT-E 5861" instead of "DOT-4DS".

b. TESTING - Pressure vessels must be retested in accordance with § 173.34(e) as applicable to DOT-4DS cylinders.

c. OPERATIONAL CONTROLS - The pressure vessels are authorized for transportation when equipped with actuating cartridges installed in the discharge outlet. The actuating

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cartridges must be approved by the Associate Administrator for Hazardous Materials Safety.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.

b. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.

c. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this exemption must be marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.

e. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.

f. The cylinder must be shipped in strong outside packagings in accordance with § 173.301(k).

g. Transportation of oxygen by aircraft is only authorized when in accordance with § 172.102(c)(2) Special Provision A52 and §§ 175.85(h) and (i).

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo aircraft only, and passenger-carrying aircraft.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each aircraft or motor vehicle used to transport packages covered by this exemption. The shipper shall furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.

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11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:


- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

Issued at Washington, D.C.



For Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

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Copies of exemptions may be obtained from the AAHMS, U.S.
Department of Transportation, 400 7th Street, S.W., Washington,
DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: KFW